

2.6 Text

A. Fonts

The seven current standard MicroStation fonts used by various functional units that are acceptable at Caltrans are shown in Appendix A6. Outdated fonts remain in the Caltrans font resource file (ctfont.rsc) to facilitate plotting/printing old and archived files with fonts that were originally used.

Font number 3 (named CTFONT1) is the main standard Caltrans font used by all functional units. Font CTFONT1 is a replication of the previous standard font LEROY (font number 2), but with modifications to the kerning (space for each letter) of some letters. CTFONT1 was developed to improve the printing quality and clarity for half-size (11" x 17") plotting/printing. Additional characters were added to both CTFONT1 and LEROY (but more characters were added to CTFONT1). The LEROY font is still used for right of way maps.

Font 3 replaced font 23 for labeling waterways and as-built changes. Use font 3 with a slant angle of 25 degrees for waterways and a slant angle of 15 degrees for as-built changes. Years ago font 1 was created to reduce the spacing between characters. With the improved kerning in font 3 along with the improved enhancements for print quality and clarity, font 1 is no longer used.

Font 43 (BOLD) is used in the preparation of project plans. Fonts 4 (CTFONT-RW), 7 (ADLINE), 55 (FANCY-OLD MON. FONT2) and 56 (SHADOW) are used by Right of Way Engineering for their specific needs.

B. Text Size – Roadway Project Plans

In the Caltrans CADD system, base maps are designed using State Plane Coordinates. Roadway project plans are developed at a ratio of 1 to 1 (real coordinate values), but are plotted at a desired scale. Standard text sizes were determined based on how the text looks relative to the sheet border and the relative prominence of various texts. Place text at the appropriate CADD standard size based on the intended plot scale for clarity and readability of text on hard copy plans.

The table below defines the text sizes to be used for roadway project plan sheets and photogrammetry based on a plot scale of 1" = 50' (Caltrans base scale). See Appendix A6 for text sizes at other acceptable plotting scales (font, weight and slant remain the same.)

| DESCRIPTION | TEXT HEIGHT/ | FONT | WEIGHT | SLANT |
|-------------|-----------------|------|--------|-------|
|-------------|-----------------|------|--------|-------|

| | WIDTH (FEET) at 1"=50' | | | |
|--|---------------------------------------|---------|---|----|
| Title Project Description | 14.5 * | 43 | 0 | 0 |
| Name and ID Code of Individual Plan Sheets, (does not apply to the Title Sheet) | 14.5 * | 43 | 0 | 0 |
| Titles for Quantity Tables and Detail Drawings. Begin and End Construction on Title Sheet | 12 | 43 | 0 | 0 |
| For Pacific Ocean | 12 | 3 | 2 | 25 |
| Country and State boundary | 11 | 43 | 0 | 0 |
| City Names on the Title Sheet Strip Map | 10 ** | 43 | 0 | 0 |
| County Names on the Title Sheet Strip Map | 10 | 43 | 0 | 25 |
| Begin and End Work on Title Sheet. Titles for Informational Tables | 10 | 3 | 2 | 0 |
| Subtitles for Tables and Detail Drawings. Route & Route No, Line Designation. *** Headings inside a Quantity Table | 8.75 **** | 3 | 2 | 0 |
| Bays | 8.75 | 3 | 2 | 25 |
| As-built Changes | 8.75 | 3 | 2 | 15 |
| River Names (Water Ways) | 7 | 3 ***** | 1 | 25 |
| Majority of Text, (including text with drawings, tables and dimensioning). County Lines and City Limit Lines | 7 | 3 | 1 | 0 |
| Restricted Space for Placement of Text | 7 6 | 3 | 0 | 0 |
| Name, Date, License Number Inside Seal and Date of Signature | 7 5 | 3 | 1 | 0 |
| Printed Names in Margin of Sheet Border | 6 | 3 | 1 | 0 |
| Photogrammetric Mapping and Survey Topographic Mapping Text | 6 | 2 | 1 | 0 |

For additional information about text sizes on contract plans not listed in the above table see the individual sections and examples in the Plans Preparation Manual.

* Adjustable if necessary (text height/width = 12 minimum).

** For projects spanning multiple counties identified on the title sheet, the text size and font for cities may be reduced to text height/width = 7, font = 3 and Wt= 1 to show counties more prominently than cities.

- *** If a layout sheet has multiple routes and is a busy, cluttered sheet making it difficult to see route labels, then the route, route number and line designation may be placed using;
 text height/width = 10, Font = 43, Wt = 0 for routes *with* work or
 text height/width = 7, Font = 3, Wt = 1 for routes *without* work.

For title sheet strip maps that cover a large area (multiple counties), the route identification may be placed using;
 text height/width = 7, Font = 3, Wt = 1 for routes *without* work.

- **** Reduce text width to 7 (minimum), if needed for restricted space when placing a heading inside a quantity table.
- ***** Do not use Font 23. It is obsolete and does not have the appropriate spacing for characters or the desired appearance for certain letters. Use Caltrans standard Font 3 (CTFONT1) at a slant angle of 25 degrees.

C. Text Size - Structures

The text size values listed in the table below applies to both a pre-version 8 (pre-V8) and a V8 format design file. In a pre-V8 format design file the text size values are in feet. But in a V8 format design file the text size values are in inches. The reason the text size values changed from feet to inches is that the sheet border in a pre-V8 format design file was 22' x 34'. In a V8 format design file the sheet border was changed to 22" x 34".

| DESCRIPTION | TEXT HEIGHT/ WIDTH (INCH) | FONT | WEIGHT |
|--|------------------------------------|------|--------|
| Informational notes - majority of plan lettering requirements and border information | 0.1400 | 3 | 1 or 2 |
| Detail Titles | 0.2400 | 3 | 4 |
| Detail Titles | 0.2400 | 43 | 0 |
| Sheet Titles and Border information | 0.2400 | 43 | 0 |

Structures seed files contain further explanation of the appropriate text size, font and weight to use within a structures design file.

D. Text Size – Right of Way Map Products

In the Caltrans CADD system, all right of way drawings are designed using State Plane Coordinates. Maps are developed at a ratio of 1 to 1 (real coordinate values), but are plotted at a desired scale. Standard text sizes were determined based on how the text looks relative to the sheet border and the relative prominence of various texts. Place text at the appropriate CADD standard size based on the intended plot scale for clarity and readability of text on hard copy prints.

The size for the text listed in the table below is based on a plot scale of 1"= 50' (Caltrans base scale).

| DESCRIPTION | TEXT HEIGHT/ WIDTH (FEET) at 1"=50' | FONT | WEIGHT |
|---|--|-------------|---------------|
| Predominantly Numeric Annotation including bearings & distances, curve data, coordinates, and stationing. | 5 | 3 | 1 |
| Detail Labels (i.e. DETAIL "A" & SEE DETAIL "A") | 10 | 3 | 3 |
| "NO SCALE" label | 5 | 3 | 2 |
| Descriptive Annotation including easement descriptions, "EXISTING R/W", "CITY LIMITS" | 5 | 4 | 1 |
| Route Label along alignment | 7 | 4 | 2 |
| Map Sheet Reference Label (i.e. "SEE MAP 81328") | 8 | 4 | 2 |
| Block & Lot/Parcel Label | | | |
| Large (i.e. BLOCK 9) | 12 | 4 | 1 |
| Medium (i.e. LOT 2, PARCEL 4) | 10 | | 1 |
| County and City Labels | 26 | 7 | 2 |
| Government Landnet Label | | | |
| Township & Range | 14 | | 3 |
| Large (i.e. SECTION 1) | 12 | 55 | 1 |
| Medium (i.e. GOVT TRACT 21) | 10 | | 1 |
| Small (i.e. GOVT LOT 3) | 8 | | 1 |
| Subdivision & Record Map Label | | | |
| Large (i.e. ROS 6-8) | 14 | 56 | 2 |
| Medium (i.e. PM 2-3) | 12 | | 2 |
| Small (i.e. OR 7-11) | 10 | | 2 |